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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,464	03/09/2001	Edward J. Bawolek	42390P4290DC	7263

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EXAMINER

DIAZ, JOSE R

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/802,464	Applicant(s) BAWOLEK ET AL.	
	Examiner José R Díaz	Art Unit 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09 March 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: please amend the specification to include the parent priority data.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohzu (US Patent No. 5,506,430).

Regarding claims 23, Ohzu teaches a method comprising: exposing a plurality of photodiodes (101, 111) of an image sensor to a light source (see fig. 1A and col. 4, lines

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31-34); and modifying a light receiving area of a first photodiode (102) and a second photodiode (112), such that, for a given size of light receiving area, a first photodiode is exposed to a greater amount of incident light (xy_1) than a second photodiode (xy_2) (see fig. 1).

Regarding claims 24 and 27, Ohzu further teaches wherein modifying the light receiving area comprises modifying on the basis of a responsivity of a color (R, G, B) assigned to one of the first photodiode and the second photodiode (consider, for example, the light receiving areas: $x_R y_R$, $x_G y_G$, and $x_B y_B$ in fig. 1B and col. 4, lines 45-50).

Regarding claims 25 and 28, Ohzu further teaches wherein modifying the light receiving area comprises masking (5) a portion of one of the first photodiode and the second photodiode from incident light (see fig. 5).

Regarding claim 26, Ohzu teaches a method comprising: providing an image sensor comprising a plurality of pixels (101, 111) (see fig. 1A and col. 4, lines 31-34); modifying a light receiving area of alternate pixels (102, 112), such that, for a given size of light receiving area, a first pixel is exposed to a greater amount of incident light (xy_1) than a second pixel (xy_2); and capturing an incident light (col. 4, lines 66-67 and col. 5, line 1).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nunogaki et al. (US Pat. No. 5,602,384) discloses a masking layer having openings 24 (see fig. 30); Back et al. (US Pat. No. 5,854,091) discloses a

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color solid-state image sensor; and Miyake et al. (US Pat. No. 5,274,250) discloses color image sensor with light-shielding layer.

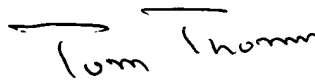
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José R Díaz whose telephone number is (571) 272-1727. The examiner can normally be reached on 9:00-5:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRD
2/22/04


Tom Thomas
Supervisory Patent Examiner
Art Unit 2815